

Work Order ID 82773-3

April 9, 2012 2:58:25 PM

Split

\*82773\*

Page 1

Item ID: D3439-101

Revision ID:

Item Name: Mirror Assembly 8"

Start Date: 4/09/12

Start Qty: 50.00

\*50\*

Required Date: 4/13/12

Req'd Qty: 50.00

\*50\*

Reference:

Accept

\*N9000040100\*

Setup Start \*NS1\*

Stop \*NS2\*

Cust Item ID:

Customer:

Approvals:

Process Plan:

CZ

Date: 12/04/09 Tooling:

Date:

Run Start \*NR1\*

QC:

Date:

SPC (Y/N):

Date:

Stop \*NR2\*

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID Tool # Plan Accept Reject Reject Insp.  
Code Qty Qty Number Stamp

Draw Nbr

Revision Nbr

D3439

Rev B

100

0.00

\*100\*

Purchasing

PURCHASING

Memo

0.00

Purchasing

Issue P/O: 1166663  
For Grote Mirror P/N: 12183  
Possible Supplier: UAP/NAPA  
Material release note is required

CZ 12/04/09 (50)

110

Receive & Inspect for Damage & Mat'l Certs

0.00

\*110\*

Packaging

Memo

0.00

Packaging

Ensure Material Release Note is attached

SP  
12-04-11

135

QC6- Inspect dimensions to drawing

0.00

\*115\*

QC

Memo

0.00

Quality Control

8/26/11

rel  
V38

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____	<b>DISPOSITION</b> Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>			
Part No. _____		Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>
NCR No. _____		Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>
		Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>
		Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data									
Equip/Tooling									
Operator									
Material									
Setup									
Other									
Process									
Supplier									
Training									
Unapproved									

**FAULT CATEGORY**

Landing Gear	General		
<input type="checkbox"/> Bending	<input type="checkbox"/> Bend	<input type="checkbox"/> Grain	<input type="checkbox"/> Ovalized
<input type="checkbox"/> Centre Not Concentric to O/S	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Hardware	<input type="checkbox"/> Over/Under tolerance
<input type="checkbox"/> Cracks	<input type="checkbox"/> Broken/Damaged	<input type="checkbox"/> Inspection Incomplete	<input type="checkbox"/> Part Incorrect
<input type="checkbox"/> Crushed/Crimped	<input type="checkbox"/> Burrs	<input type="checkbox"/> Instructions Incomplete/Unclear	<input type="checkbox"/> Part Lost/Missing
<input type="checkbox"/> Cuffs	<input type="checkbox"/> Contamination	<input type="checkbox"/> Maintenance	<input type="checkbox"/> Part Moved
<input type="checkbox"/> Heat Treat	<input type="checkbox"/> Countersink	<input type="checkbox"/> Mislabeled	<input type="checkbox"/> Positioned Wrong
<input type="checkbox"/> Inspection Strip in Tube	<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Misread	<input type="checkbox"/> Power Loss/Surge
<input type="checkbox"/> Ripples in Bend	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Offset	<input type="checkbox"/> Pressure/Forced
<input type="checkbox"/> Torque Waves in Extrusion	<input type="checkbox"/> Drawing	<input type="checkbox"/> Out of Calibration	<input type="checkbox"/> Temperature/Cure
<input type="checkbox"/> Turning Sequence	<input type="checkbox"/> Finish	<input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Weld
<input type="checkbox"/> Wave/Twist in Tube	<input type="checkbox"/> Folio	<input type="checkbox"/> Outside Dimensions	<input type="checkbox"/> Wrong Stock Pulled
			<input type="checkbox"/> Other



# Work Order ID 82773

April 9, 2012 2:58:25 PM

**\*82773\***

Page 2

Item ID: D3439-101

Accept

**\*N900040100\***

Setup Start **\*NS1\***

Revision ID:

Item Name: Mirror Assembly 8"

Stop **\*NS2\***

Start Date: 4/09/12 Start Qty: 50.00

**\*50\***

Cust Item ID:

Required Date: 4/13/12 Req'd Qty: 50.00

**\*50\***

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start **\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop **\*NR2\***

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

120

**\*120\***

Small Fab

Small Fab

Small Fab

Memo

0.00

1- Discard Hardware.  
2- Drill and Tap mirror as per Dwg using D19670 , then install stud as per dwg.  
3- Plug drain holes with Sikaflex.  
Ensure that mirror adheres to housing.

Pick:

Qty Part Number Description Batch

A/RN/A Sikaflex-241/-291

Sikaflex expiry date 13-4-12

**R12/409**

*Ex 20x*

*[Signature]*  
**4/10/07**

130

**\*130\***

QC

Quality Control

QC5- Inspect part completeness to step on W/C)

0.00

Memo

0.00

**Smb 12-8-07**

**DAS 16 12-8-07**

**12/08/13**

**20**



NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <table style="width: 100%; border: none;"> <tr> <td style="width: 25%;">Skid-tube <input type="checkbox"/></td> <td style="width: 25%;">Crosstube <input type="checkbox"/></td> <td style="width: 25%;">Water Jet <input type="checkbox"/></td> <td style="width: 25%;">Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
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Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

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Doc/Data									
Equip/Tooling									
Operator									
Material									
Setup									
Other									
Process									
Supplier									
Training									
Unapproved									

**FAULT CATEGORY**

Landing Gear	General	Other
<input type="checkbox"/> Bending	<input type="checkbox"/> Bend	<input type="checkbox"/> Grain
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<input type="checkbox"/> Cracks	<input type="checkbox"/> Broken/Damaged	<input type="checkbox"/> Inspection Incomplete
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		<input type="checkbox"/> Positioned Wrong
		<input type="checkbox"/> Power Loss/Surge
		<input type="checkbox"/> Pressure/Forced
		<input type="checkbox"/> Temperature/Cure
		<input type="checkbox"/> Weld
		<input type="checkbox"/> Wrong Stock Pulled
		<input type="checkbox"/> Other

# Work Order ID 82773

April 9, 2012 2:58 25 PM

**\*82773\***

Page 3

Item ID: D3439-101

Accept

**\*N900040100\***

Setup Start **\*NS1\***

Revision ID:

Item Name: Mirror Assembly 8"

Stop **\*NS2\***

Start Date: 4/09/12 Start Qty: 50.00

**\*50\***

Cust Item ID:

Required Date: 4/13/12 Req'd Qty: 50.00

**\*50\***

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start **\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop **\*NR2\***

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID Tool # Plan Accept Reject Reject Insp.  
Code Qty Qty Number Stamp

140

Identify as per dwg & Stock Location: 229

0.00

**\*140\***

Packaging

Memo

0.00

Packaging

150

QC21- Final Inspection - Work Order Release

0.00

**\*150\***

QC

Memo

0.00

Quality Control

MLJ 12/08/17

mf  
12-08-15





# Picklist Print

April 9, 2012 2:58:25 PM

Page 1

Work Order ID: 82773

Parent Item: D3439-101

Parent Item Name: Mirror Assembly 8"

Start Date: 4/09/12

Required Date: 4/13/12

Start Qty: 50.00

Required Qty: 50.00

Comments: IPP A05.07.20New issueKJ/JLM  
ver:ec

IPP Rev:B 10.09.08 per dwg RevB DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
12183 GROTE MIRKOR		Purchased	No			120	Each	0.0000	1	50			
D3015-3 Locknut		Manufactured	No			120	Each	202.0000	1	50			
				<u>Location</u>		<u>Loc Qty</u>	<u>Loc Code</u>						
				ST023		202							
				78314		202							
D3439-3 Stud		Manufactured	No			120	Each	42.0000	1	50			
				<u>Location</u>		<u>Loc Qty</u>	<u>Loc Code</u>						
				GA		42							
				73802		2							
				77048		40							
NAS1149C0563R Washer		Purchased	No			120	Each	404.0000	1	50			
				<u>Location</u>		<u>Loc Qty</u>	<u>Loc Code</u>						
				ST296		200							
				120422		200							
				ST297		204							
				116391		4							
				117460		200							

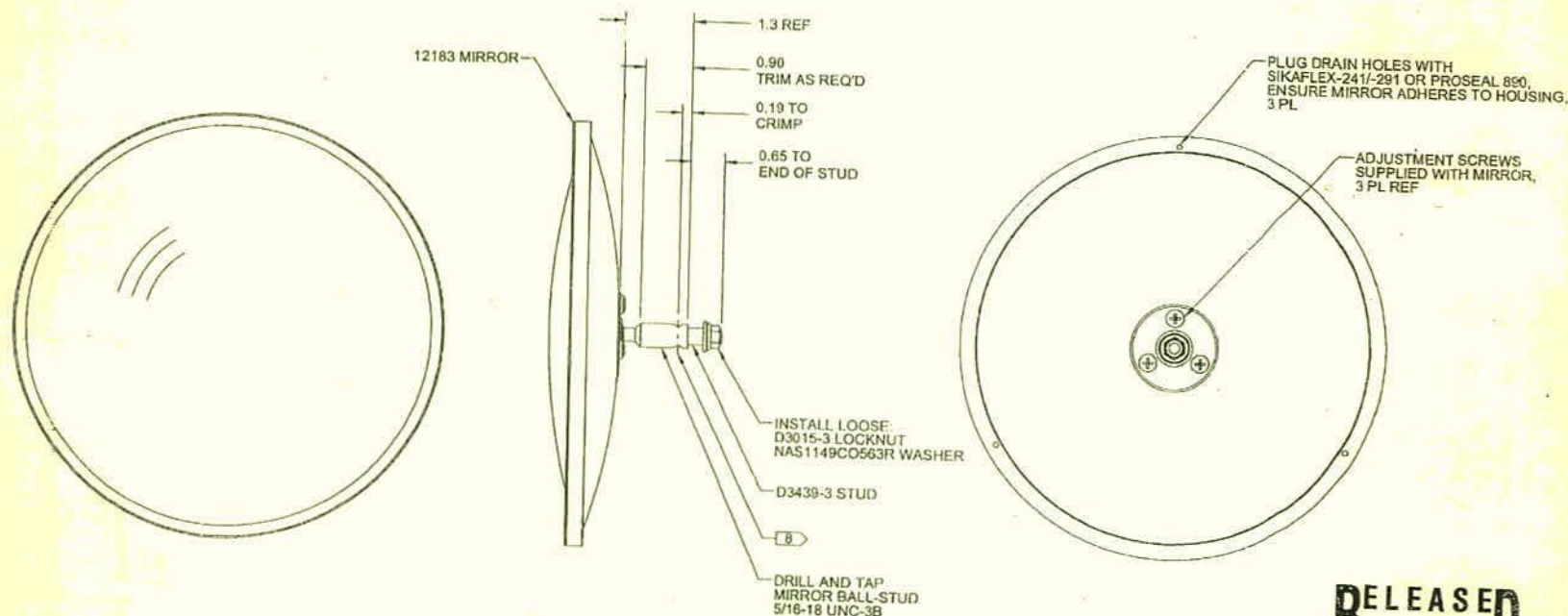
SP-04-11  
4/12/08/07  
20  
4/12/08/07  
20  
4/12/08/07  
20







ITEM	QTY	P/N	DESCRIPTION
1	X	D3439-101	MIRROR ASSEMBLY, 8"
2	1	12183	MIRROR 8" (GROTE)
3	1	D3015-3	LOCKNUT
4	1	D3439-3	STUD
5	1	NAS1149CO563R	WASHER (OR AN960JD538)



**D3439-101 MIRROR ASSEMBLY**

**NOTES:**

- 1) MATERIAL: MIRROR= 8" ROUND CONVEX MIRROR W/ STAINLESS STEEL CASE  
CENTER-MOUNT BALL-STUD W/ 1/4-20 X 1" DEEP FEMALE THREAD  
GROTE INDUSTRIES, 2800 LANIER DRIVE, MADISON, INDIANA 47250
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QS1 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3439-101" USING REMOVEABLE TAG
- 7) WEIGHT: 1.18 lbs
- 8) TO INSTALL D3439-3 STUD:
  - APPLY LOCKTITE 262 TO THREADS BEING INSTALLED INTO MIRROR BALL-STUD
  - THREAD D3439-3 STUD INTO MIRROR BALL-STUD
  - CRIMP MIRROR BALL-STUD ON OPPOSING SIDES, 0.19 FROM END AS ILLUSTRATED USING TOOL DT8317
  - CRIMP TO DEPTH OF 0.015-0.030 USING R0.125

**RELEASED**  
2010-09-07

B	REDRAW, ADD -3 (WAS PURCHASED/TRIMMED BOLT).	CP	10.07.20
A	NEW ISSUE	CP	05.05.27
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	10.07.20		

**DART AEROSPACE LTD**  
HAWKESBURY, ONTARIO, CANADA

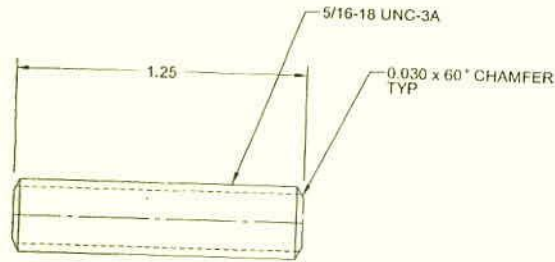
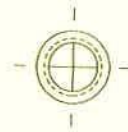
DRAWING NO. **D3439** REV. B  
SHEET 1 OF 2  
TITLE **MIRROR ASSEMBLY** SCALE NTS

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212104109  
W10: 82773







D3439-3 STUD

**RELEASED**  
2010-09-07

**NOTES:**

- 1) MATERIAL: AIS. 303 STAINLESS STEEL ROUND BAR PER ASTM A582  
REF DART SPEC M303R
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.03 lbs

DESIGN		<b>DART AEROSPACE LTD</b>	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. B
MFG. APPR.		D3439	SHEET 2 OF 2
APPROVED		TITLE	SCALE
DE APPR.		MIRROR ASSEMBLY	WTS
DATE	10.07.20	COPYRIGHT © 2010 BY DART AEROSPACE LTD	

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Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID PO16663

Purchase Order Date 4/09/12

PO Print Date 4/09/12

Page Number 1 of 1

Order From :

VC-AUT001

AUTO PARTS EXTRA  
1000 RUE LANSDOWNE  
HAWKESBURY, ON K6A 1H7  
CA

Contact Name

Vendor Phone

613 632 1191

Vendor Fax

613 632 2350

Vendor Account Nbr

Buyer

Chantal Lavoie

Requisition Nbr

Tax Resale Nbr

10127-2607

Terms

Net 30

Currency

CAD

FOB

Destination-Collect

Ship To :

DART AEROSPACE LTD

1270 ABERDEEN  
HAWKESBURY, ON K6A 1K7  
CANADA



Line Nbr	Reference Revision ID Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	Req Qty/ Unit of Measure	Ship Method	Unit Price	Extended Price
1	12183	GROTE MIRROR	4/12/12 Yes	50.00 Each	Yours ppd	\$21.4900	\$1,074.5

Special Inst:

AS PER DWG D3439 REV. B  
B82773  
P/N: GROTE 12183

PO Total:

\$1,074.5

Change Nbr:

1

Change Date: 4/09/12

No substitution or deviation without  
consent.  
Certificate of Conformity or Material  
Certification required when applicable





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TRUCK PARTS • PIÈCES DE CAMION  
PERFORMANCE PARTS • PIÈCES DE PERFORMANCE  
TIRES • PNEUS**

www.bensonautoparts.com

**Benson**

C-11909

Post due accounts bear 2% interest per month (24% per annum). If this account is placed with a 3rd party collection, an administrative cost of 25% will be added. All exchanges and refund claims must be accompanied by this invoice. Electrical parts not returnable. All parts returned are subject to 20% handling charge. All merchandise sold on this invoice remains the vendor's property until this invoice is paid in full.  
TERMS: Payment due on 10th day of the following month.

Aucun remboursement sans cette facture. Not 30 jours, 2% de frais d'intérêt par mois (24% par année) sur compte en souffrance. 20% de frais de manipulation sur toute marchandise retournée. Clause pénale une indemnité de 25% sera chargée sur compte sujet à des procédures légales. Les marchandises mentionnées sur cette facture demeurent la propriété du vendeur tant qu'elles ne seront pas entièrement payées. Pièces électriques non-retournable.  
TERMES: Compte payable le 10 du mois suivant.

SIGNATURE

*Thank You*

1000 RUE LANDSDOWNE HAWKESBURY, ON K6A 1H7  
TEL: (613)632-1191 FAX: (613)632-2350

TVQ: 1016330716 TQ0001 — HST/TPS: 10035 3366 RT0001

*Merci*

WE THANK YOU FOR YOUR BUSINESS

4/VERSUS BUSINESS FORMS (CORNWALL) (613) 936-1862

113336 (613)632-5200  
S V DART AEROSPACE LTD.  
O L N 270 ABERDEEN STREET  
D U  
Y O HAWKESBURY ON K6A 1H7

EXPEDITE  
SHIP TO A

113336

SAME

011  
DATE: 4/11/12  
07:43  
112 ALP

PO: 16663

ORD / COM	SHIP / EXP	CODE	PART No / PIÈCES	DESCRIPTION	LIST / CHACUN	COST / COÛTANT	EXTENSION
17	17	088	12183	8" CONVEX - STAINI	39.42	21.49	365.33
25	25	088	12183	BOV: UNI			
8	8	088	12183	8" CONVEX - STAINI	39.42	21.49	537.25
				BOV: UNI			
				8" CONVEX - STAINI	39.42	21.49	171.92
				BOV: 030			
				PIECES/CORE 101			
				242			

SHIP VIA

